#### IEEE SWITCHGEAR COMMITTEE CORRESPONDENCE

Minutes: IEEE High-Voltage Fuse Subcommittee

Place: Denver, Colorado
Date: Sept 30th 2009
Presiding officer: John Leach - Chair

Recorder: Frank Muench - Secretary

MEMBERS PRESENT

R. L. Capra Consultant

Dan Gardner T&B – Hi-Tech

G. Haynes ABB Inc.

J. G. Leach Consultant - T&B/Hi-Tech Fuses

F. J. Muench Cooper Power Systems

M. Stavnes S & C Electric

J. Zawadzki Powertech Labs Inc.

### **MEMBERS ABSENT**

J. G. Angelis\* Consultant

G. Borchardt S & C Electric Company
F. Calderon AC Electric Systems
H. E. Foelker\* Central Power & Light
S. P. Hassler\* Cooper Power Systems
F. Ladonne\* Underwriters Laboratories

J. R. Marek Consultant
D. Parker Alabama Power
R. N. Parry Cutler Hammer

T. E. Royster\* Dominion Virginia Power

R. Ranjan\* Consultant

J. S. Schaffer\* G & W Electric Co.

\* Correspondence Only

**GUESTS** 

Bob Brown Hubble Power Systems

Harry Hirz T&B
Ed Jankowich T&B
Chris Lettow S&C

Dudley Marshall Hubble Power Systems

Sean Moody Ferraz Shawmut

Eric Vaughn US Bureau of Reclamation Alan Yerges Cooper Power Systems

- 1. Call meeting to order at 1:35
- 2. Member /guest introduction 7 members 8 guests
- 3. Roster check: no changes
- 4. The IEEE Patent policy: Presented and explained
- 5. Approval of May 6th minutes: Minutes reviewed and approved as circulated
- 6. Report from the Chair: Nothing to report

7. Standards status report: Attached as appendix B. Details: C37.40 reaffirmed in 2009, C37.41 approved and published in 2008; two tables screwed up during editing process and an errata was published. John Leach will send a copy of the new version to the subcommittee/working group. C37.42 Par approved in 2007, 2<sup>nd</sup> ballot completed and submitted to RevCom for approval. C37.43 approved in 2008 and published in July, C37.45 published in 2007, C37.46 PAR approved 2009 and in revision, ballot has started, C37.47 revision of PAR applied for, C37.48 approved 2005, will need reaffirmation in 2010, C37.48.1 Par applied for and work has begun.

### 8. Working Group Reports

- a. Revision of Fuse Specification Standards M. Stavnes\* 8 member 3 guests, 2 new members, Alan Yerges and Frank Lambert. C37.42 was recirculated with 100% approval, submitted to RevCom; C37.46 started balloting yesterday will continue till Wednesday before Thanksgiving. C37.47 PAR revision submitted, and work will begin after completion of C37.46 to forestall future negatives.
- b. Revision of Fuse Standards J. G. Leach\* 10 members and 5 guests; report presented by NEETRAC on polymer cutouts to create a test program for these devices. They are taking a very positive approach, in trying out tests until we know which produce an effective diagnostic test and then recommendations will be made for changes in C37.41. A PAR for the revision of C37.48.1 has been submitted. Revision work has begun, and proposed changes were reviewed. The intention is to make only slight improvements, reformatting the present document to latest IEEE formats. The group will look at adopting an IEC version under development (with significant US participation) for a future revision.

#### 9. Report of liaison to other committees

#### ER&P Committee - J. G. Leach:

- **a.** Recognition a paper on fuses has been proposed for a prize paper.
- b. Minutes of WG meeting need to be reflected on the Switchgear web-site. Our practice has been to summarize them in our sub-committee minutes. This practice has been acceptable for many years John asked if any change to this practice was needed. The working group chairs responded in the negative, so present practice will be continued. All submissions to the web will be in .pdf format. No spread-sheets, PowerPoint presentations, etc will be available in their native format to discourage miss-use. The minutes are the official version of what has transpired at meetings and should be no more than this.
- **10. Report of IEC activities J. G. Leach**: See Annex A. MT3 and AHG-1 met in March no meetings since then. IEC 60282-2 circulated as a FDIS; changes corrected wide-spread errors; so the standard is being fully revised. There were no negatives. Report from Ad Hoc group 1, reviewing and creating a draft to guide fuse application. Ah Hoc Recommended a table of contacts. 32A subcommittee to review and crate a working group to create actual document.
- 11. Unfinished business none
- 12. New business none
- 13. Next meeting

Myrtle Beach, April 25 - 29

14. Adjournment - 2;15PM

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# IEC Report 2009-2 September 2009

From: Dr. John G. Leach, Technical Advisor SC32A, May 5<sup>th</sup> 2009



## IEC actions since May 2009:

There have been no meetings since the March 24<sup>th</sup> and 25<sup>th</sup> 2009 meetings of The MT3 editing group and AHG1 in Puteaux, Paris.

A new version of IEC 60282-1 (IEC SC32A/274/FDIS) was circulated as an FDIS (changes were only extensive typographical corrections from the previous version). This received no negative votes and only minor editorial revisions.

The report IEC 32A/272/INF from AHG-1 "Report of the Ad-Hoc Group, AHG-1, on the possible project of a User's Guide" was circulated to National Committees in advance of the SC32A meeting to be held at the IEC General Meeting October 18<sup>th</sup> – 22<sup>nd</sup> 2009, in Tel Aviv, Israel. At that meeting members will be asked to approve the setting up of a Working Group to develop a User's Guide for all fuses. Since all those reported to be attending the Tel Aviv meeting were on the AHG, success seems likely. A call for additional experts to those nominated in Tel Aviv will be made. There will also be a meeting of MT3 in Tel Aviv. It is anticipated that additional "unofficial" preparatory work on the guide will be done before and during the Tel Aviv meetings.

John Leach, 9-27-09

Document	Title	SubCommittee	WG Chair	PAR	IEEE Status	Activity
C37.40	Standard Service Conditions and Definitions for High-Voltage Fuses, Distribution Enclosed Single-Pole Air Switches, Fuse Disconnecting Switches, and Accessories	HVF	John Leach j.g.leach@ieee,org		Approved 2003 R2009	Reaffirmed 3/19/2009
C37.41	Standard Design Tests for High-Voltage Fuses, Distribution Enclosed Single-Pole Air Switches, Fuse Disconnecting Switches, and Accessories	HVF	John Leach j.g.leach@ieee,org		Approved 2008	Published 3/13/2009
C37.42	Standard Specification for High-Voltage Expulsion Type Distribution Class Fuses, Cutouts, Fuse Disconnecting Switches and Fuse Links	HVF	Mark Stavnes  MStavnes@sandc.com	Approved 2007	Approved 1996	In revision. Second ballot completed.
C37.43	Standard Specifications for High-Voltage Expulsion, Current-Limiting and Combination Type Distribution and Power Class External Fuses, with Rated Voltages from 1kV through 38kV, Used for the Protection of Shunt Capacitors	HVF	John Leach j.g.leach@ieee,org		Approved 2008	Published 7/25/08
C37.45	Standard Specifications for High-Voltage Distribution Class Enclosed Single-Pole Air Switches with Rated Voltages from 1kV through 38kV	HVF	Mark Stavnes  MStavnes@sandc.com		Approved 2007	Published 9/20/2007
C37.46	Standard for High-Voltage Expulsion and Current-Limiting Type Power Class Fuses and Fuse Disconnecting Switches	HVF	Mark Stavnes  MStavnes@sandc.com	Approved 2009	Approved 2000	In revision
C37.47	Standard Specifications for High-Voltage Current-Limiting Type Power Class Fuses and Fuse Disconnecting Switches	HVF	Mark Stavnes  MStavnes@sandc.com	Approved 2009	Approved 2000	In revision
C37.48	Guide for Application, operation, and Maintenance of High-Voltage Fuses, Distribution Enclosed Single-Pole Air Switches, Fuse Disconnecting Switches, and Accessories	HVF	John Leach j.g.leach@ieee,org		Approved 2005	No activity
C37.48.1	Guide for the Operation, Classification, Application, and Coordination of Current-Limiting Fuses with Rated Voltages 1-38kV	HVF	John Leach j.g.leach@ieee,org	Submitted	Approved 2002 R2008	PAR for revision applied for.